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A NEW SPECIES OF COMMENSAL AMPHIPOD FROM A SPINY LOBSTER

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In January 1942 the late E. F. Ricketts, in connection with the work of his Pacific Biological Laboratory, at Pacific Grove, Calif., examined a living spiny lobster *Panulirus interruptus* (Randall) at the local fish market. The lobster, which was presumably sent from Santa Barbara, had some amphipods adhering to its pleopods, and six of these were sent to me for identification. I find that these specimens represent a new species. The structure of the peraeopods indicates that they were modified and developed for the purpose of grasping, and the animals appear to have been living commensally upon the pleopods of the lobster. The mouthparts are of the normal type and are not modified in any way, thus indicating that the animal is not parasitic. The specimens are all females possessing partially developed marsupial plates.

PARAPLEUSTES COMMENSALIS, new species

Figure 83

Female.—Head with rostrum rather short and blunt; lateral lobes rounding; eye rather large, black, and reniform. Antenna 1: Peduncular joints short; first joint not twice as long as second; second joint not twice as long as third; flagellum about twice as long as peduncle and containing 14 joints (an unknown number of terminal joints are missing). Antenna 2: Peduncle short; fourth joint about twice as long as third and equal in length to the fifth; flagellum a little longer than peduncle and consisting of 13 joints.

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Right mandible with 10 or 11 teeth in cutting plate; no accessory plate; molar conical with very small triturating surface; 12 spines in spine-row; palp with third joint slightly longer than second and not apically produced. Maxilla 1: Inner plate small with one plumose apical seta; outer plate with nine spine-teeth; palp with eight apical spines, and three submarginal setae on the outer surface. Maxilla 2: Inner plate with one long plumose seta on inner margin. Maxilliped: Inner plate reaching to the base of the first joint of palp, armed distally with four or five very short spine-teeth and two slender spines, and on the inner margin with one long spine; outer plate reaching a little beyond the base of the second joint of palp, armed on inner edge with eight slender submarginal spine-teeth and on the outer surface with six small submarginal spinules; palp with first three joints subequal in length.

First four coxal plates a little deeper than their respective body segments. Gnathopod 1 as shown in fig. 83, *F;* sixth joint with palm oblique, convex, armed with a row of submarginal spinules, and defined by two spines, below which on the hind margin of joint is another pair of spines; seventh joint fitting palm. Gnathopod 2, like gnathopod 1, but a little longer. Peraeopods 1 and 2 alike; sixth joint strongly developed, hind margin armed with seven pairs of stout spines against the distal four of which the seventh joint closes, forming a grasping organ. Peraeopods 3 to 5 are alike, but the fourth is somewhat the longest; second joint well expanded; sixth joint strongly developed and armed on the front margin with groups of stout spines, which together with the seventh joint form an effective grasping organ.

The lower posterior angle of the metasome segments minutely and sharply produced. Uropods as shown by Sars for *Stenopleustes malmgreni* (Crustacea of Norway, 1893, vol. 1, pl. 125, fig. 1) except that the outer ramus of uropod 3 is proportionately shorter in Sars' figure. Uropod 1 reaching a little farther back than uropod 2. Uropod 3 reaching back about as far as uropod 2. Telson reaching to the distal end of peduncle of uropod 3, three-fourths as wide as long with the convex sides converging to the evenly rounding extremity. Length from front of head to end of uropods 5.5 mm.

Type.—A female, U.S.N.M. No. 85260, taken from the pleopods of a spiny lobster *Panulirus interruptus*, from Santa Barbara, Calif., January 22, 1948, by E. F. Ricketts.

FIGURE 83.—*Parapleustes commensalis*, new species, female: *A*, Head; *B*, mandible; *C*, maxilla 1; *D*, maxilliped; *E*, lower lip; *F*, gnathopod 1; *G*, gnathopod 2; *H*, peraeopod 2; *I*, peraeopod 3; *J*, metasome; *K*, telson.

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